

ABSTRACT

THE EFFECTIVENESS OF LEARNING MEDIA METROLOGY WITH ADOBE FLASH IN SMK MUHAMMADIYAH 1 BANTUL

**Oleh:
Andy Wibowo
06503241034**

The objectives of this research are: 1) to find out the students' knowledge before and after they are given learning treatment through Adobe Flash media, 2) to find out the students' knowledge before and after they are not given learning treatment through Adobe Flash media, 3) to find out the students' knowledge differences between the students who are given learning treatment through Adobe Flash media and the students who are not given learning treatment through Adobe Flash media, 4) to find out the effectiveness value of Adobe Flash media in improving students' knowledge.

The method used in this research is *Quasi Experimental* with the research design is *Nonequivalent Control Group Design*. This research was conducted at SMK Muhammadiyah 1 Bantul with which the subjects were Grade X TP 3 (experimental class with 39 students) and Grade X TP 2 (control class with 39 students). The data collecting technique used were pretest (before giving the treatment) and posttest (after giving the treatment). The data were analyzed using t-test.

The research findings show that: (1) There is a difference of the experimental class students' knowledge before and after following teaching and learning through *Adobe Flash* media, i.e 40,46 to 69,72 with which t-test results show that t count (13,87) is higher than t table (2,00). (2) There is a difference of the control class students' knowledge before and after following teaching and learning without Adobe Flash media, i.e 41,62 to 62,67 with which t-test results show that t count (11,76) is higher than t table (2,00). (3) The improvement of the experimental class students' knowledge is higher or faster than the improvement of the control class students' knowledge, i.e $69,72 > 62,67$. (4) The effectiveness value of the using of Adobe Flash learning media in improving students' knowledge is 8,21. Thus, it shows that the using of Adobe Flash learning media gives more effective and positive contributions on the students' knowledge than it that does not use Adobe Flash learning media.